

*1260/5*

RTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/669,141	
	Filing Date	September 23, 2003	
	First Named Inventor	Milan Kokta	
	Art Unit	1775	
	Examiner Name	Stephen J. Stein	
Total Number of Pages in This Submission	12	Attorney Docket Number	1035-BI4282

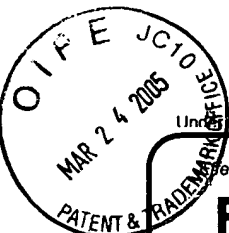
ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	<input type="checkbox"/> Proprietary Information
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): List of Related Applications (1 pg); Form PTO-1449 (5 pgs); Cited References (36); Return Receipt Post Card	
<input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<b>Remarks</b> CUSTOMER NO.: 34456	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	TOLER, LARSON & ABEL, LLP		
Signature			
Printed name	John R. Schell		
Date	03/21/2005	Reg. No.	50,776

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature			
Typed or printed name	Elise K. Dougherty	Date	03/21/2005

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Effective on 10/01/2004. Patent fees are subject to annual revision.

**FEE TRANSMITTAL**  
**For FY 2005**

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$)

180.00

**Complete if Known**

Application Number

10/669,141

Filing Date

September 23, 2003

First Named Inventor

Milan Kokta, et al.

Examiner Name

Stephen J. Stein

Art Unit

1775

Attorney Docket No.

1035-BI4282

**METHOD OF PAYMENT** (check all that apply)

☐ Check

☐ Credit Card

☐ Money Order

☒ Deposit Account

☐ None

Deposit Account Number

50-2469

Deposit Account Name

TOLER, LARSON & ABEL, LLP

The Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below

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**FEE CALCULATION**

**1. BASIC FILING FEE**

Fee Description	Fee (\$)	Small Entity Fee (\$)	Fee Paid(\$)
Utility Filing Fee	790	395	
Design Filing Fee	350	175	
Plant Filing Fee	550	275	
Reissue Filing Fee	790	395	
Provisional Filing Fee	160	80	
<b>Subtotal (1) \$ 0.00</b>			

**2. EXTRA CLAIM FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20	18	9
Each independent claim over 3	88	44
Multiple dependent claims	300	150
For Reissues, each claim over 20 and more than in the original patent	18	9
For Reissues, each independent claim more than in the original patent	88	44
<b>Total Claims</b> <b>Extra Claims</b> <b>Fee (\$)</b> <b>Fee Paid (\$)</b>		
- 20 or HP =      x      =		
HP = highest number of total claims paid for, if greater than 20		
<b>Indep. Claims</b> <b>Extra Claims</b> <b>Fee (\$)</b> <b>Fee Paid (\$)</b>		
- 3 or HP =      x      =		
HP = highest number of independent claims paid for, if greater than 3		
<b>Multiple Dependent Claims</b> <b>Fee (\$)</b> <b>Fee Paid (\$)</b>		
<b>Subtotal (2) \$ 0.00</b>		

**3. OTHER FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)	Fee Paid(\$)
1-month extension of time	120	60	
2-month extension of time	430	215	
3-month extension of time	980	490	
4-month extension of time	1,530	765	
5-month extension of time	2,080	1,040	
Information disclosure stmt. fee	180	180	180.00
37 CFR 1.17(q) processing fee	50	50	
Non-English specification	130	130	
Notice of Appeal	340	170	
Filing a brief in support of appeal	340	170	
Request for oral hearing	300	150	
Other:			
<b>Subtotal (3) \$ 180.00</b>			

**SUBMITTED BY**

Signature

Registration No. (Attorney/Agent)

50,776

Telephone

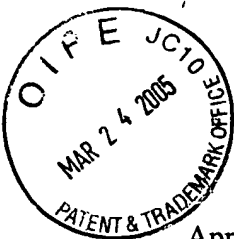
512-327-5515

Name (Print/Type)

John R. Schell

Date

03/21/2005



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Milan Kokta, et al.

Title: SPINEL ARTICLES AND METHODS FOR FORMING SAME

Application No.: 10/669,141

Filed: September 23, 2003

Examiner: Stephen J. Stein

Group Art Unit: 1775

Atty. Docket No.: 1035-BI4282

COMMISSIONER FOR PATENTS  
PO Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT TRANSMITTAL**

Dear Sir:

Pursuant to 37 C.F.R. § 1.56, § 1.97 and § 1.98, the undersigned brings the patents, publications, applications or other information identified in the attached:

- ☒ Form(s) PTO/SB/08A and/or PTO/SB/08B or PTO/1449  
☐ Other: n/a

to the Examiner's attention in the above-identified application. Citation of such information shall not be construed as:

1. an admission that the information necessarily is, or corresponds to, prior art with respect to the instant invention;
2. a representation that a search has been made, other than as described below; or
3. an admission that the information cited herein is, or is considered to be, material to patentability as defined in § 1.56(b).

For each item of information listed that is not in the English language, the undersigned has provided a concise explanation of the relevance, such as through (i) an English language abstract, (ii) an English language equivalent application, (iii) reference to discussion in the application, or (iv) if cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action that indicates the degree of relevance found by the foreign office.

CERTIFICATE OF TRANSMISSION/MAILING

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Elise K. Dougherty  
Typed or Printed Name

*E.K. Dougherty*  
Signature

03/24/2005 SLUANG1 00000027 502469 10669141  
01 FC:1806 180.00 DA

STATEMENT UNDER 37 C.F.R. § 1.704(d)

If the above-identified application is an original application filed on or after May 29, 2000:

- ☐ each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of this Information Disclosure Statement.

FEES DUE

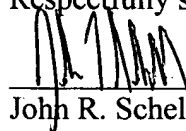
This Information Disclosure Statement is being filed:

- ☐ within three months of the filing date of a national application or within three months of entry of the national stage as set forth in § 1.491 in an international application. Therefore, no fee is required.
- ☐ before the mailing date of a first Office action on the merits or before the mailing date of a first Office action after the filing of a request for continued examination under § 1.114. Therefore, no fee is believed required.
- ☐ during the period specified in § 1.97(c). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application not more than three months prior to the filing of this Information Disclosure Statement.
- ☒ during the period specified in § 1.97(c). Accordingly, the fee set forth in § 1.17(p) is required and provided as shown on the attached Fee Transmittal.
- ☐ during the period specified in § 1.97(d). Accordingly, the fee set forth in § 1.17(p) is required and provided as shown on the attached Fee Transmittal. Additionally, each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application not more than three months prior to the filing of this Information Disclosure Statement.

Should any PTO fees be necessary for entry of this Information Disclosure Statement, the undersigned hereby authorizes the Commissioner to charge Deposit Account 50-2469.

3.21.05  
\_\_\_\_\_  
Date

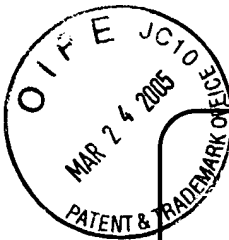
Respectfully submitted,



\_\_\_\_\_  
John R. Schell, Reg. No.: 50,776  
Agent for Applicant(s)  
TOLER, LARSON & ABEL, L.L.P.  
5000 Plaza On The Lake, Suite 265  
Austin, Texas 78746  
(512) 327-5515 (phone)  
(512) 327-5452 (fax)

LIST OF RELATED APPLICATIONS

<u>Application No.</u>	<u>Filing Date</u>	<u>Applicant(s)</u>	<u>Docket No.</u>
10/802,160	03/17/04	Stone-Sundberg, et al.	1075-BI4309



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**Complete if Known****INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 5

Application Number	10/669,141
Filing Date	September 23, 2003
First Named Inventor	Milan Kokta
Art Unit	1775
Examiner Name	Stephen J. Stein
Attorney Docket Number	1035-BI4282

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA	US- 3,625,868	12/07/1971	Grabmaier et al.	
	AB	US- 3,736,158	05/29/1973	Cullen et al.	
	AC	US- 3,816,906	06/18/1974	Faickenberg	
	AD	US- 3,883,313	05/13/1975	Cullen et al.	
	AE	US- 3,885,978	05/27/1975	Doi et al.	
	AF	US- 3,990,902	11/09/1976	Nishizawa, et al.	
	AG	US- 3,950,504	04/13/1976	Belding et al.	
	AH	US- 4,370,739	01/25/1983	Wang et al.	
	AI	US- 4,755,314	07/05/1988	Sakaguchi et al.	
	AJ	US- 5,138,298	08/11/1992	Shino	
	AK	US- 5,850,410	12/15/1998	Kuramata	
	AL	US- 6,533,874 B1	03/18/2003	Vaudo et al.	
	AM	US- 2003/0188678 A1	10/09/2003	Kokta et al.	
	AN	US- 6,839,362 B2	01/05/2005	Kokta et al.	
	AO	US- 6,844,084 B2	01/18/2005	Kokta et al.	
	AP	US- 3,424,955	01/28/1969	Seiter et al.	
	AQ	US- 5,557,624	09/17/1996	Stultz, et al.	
	AR	US- 6,366,596	04/02/2002	Yin, et al.	
	AS	US- 6,023,479	02/08/2000	Thony, et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	AT	FR 1,471,976	03/24/1966	Siemens Aktiengesellsc.	Corr. 3,424,955	
	AU	JP 11-157997	06/15/1999	Kyocera Corporation	Abstract Only	
	AV	JP 09-278595	10/28/1997	Sumitomo Elect. Ind. Ltd.	Abstract Only	
	AW	JP 62-188325	08/17/1987	Sumitomo Elect. Ind. Ltd.	Abstract Only	
	AX	JP 58-211736	12/09/1983	Toshiba Corporation	Abstract Only	
	AY	JP 07-307316	11/21/1995	Sumitomo Elect. Ind. Ltd.	Abstract Only	

Examiner  
SignatureDate  
Considered

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

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Application Number	10/669,141
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First Named Inventor	Milan R. Kokta
Art Unit	1775
Examiner Name	Stephen J. Stein
Attorney Docket Number	1035-BI4282

Sheet 2

of 5

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	BA	US- 4,963,520	10/16/1990	Yoo, et al.	
	BB	US- 5,982,796	11/09/1999	Kokta, et al.	
	BC	US- 5,654,973	08/05/1997	Stultz, et al.	
	BD	US-			
	BE	US-			
	BF	US-			
	BG	US-			
	BH	US-			
	BI	US-			
	BJ	US-			
	BK	US-			
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	BO	US-			
	BP	US-			
	BQ	US-			
	BR	US-			
	BS	US-			

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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	BT	EP 0 263 171 B1	11/25/1992	UOP		
	BU	EP 0 762 930 B1	07/12/2000	BP Amoco Corporation		
	BV	WO 01/99155 A2	12/27/2001	Nichia Corporation		
	BW	WO 02/095887 A2	11/28/2002	SG Ceramics & Plastics, Inc.		
	BX					
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Art Unit	1775
Examiner Name	Stephen J. Stein
Attorney Docket Number	1035-BI4282

Sheet

3

of

5

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	Efimov, A.N., et al., "On an Unusual Azimuthal Orientation Relationship in the System Gallium Nitride Layer on Spinel Substrate", CRYSTALLOGRAPHY REPORTS, 45(2): 312-317 (2000).	
	CB	Sun C.J., et al., "Mg-doped green light emitting diodes over cubic (1 1 1) MgAl <sub>2</sub> O <sub>4</sub> substrate", APP. PHYS. LETT. 72(19): 2361-2363 (1998).	
	CC	Efimov, A.N., et al., "Symmetry constraints and epitaxial growth on non-isomorphic substrate", THIN SOLID FILMS 260: 111-117 (1995).	
	CD	George, T., et al., "Novel symmetry in the growth of gallium nitride on magnesium aluminate substrates", APPL. PHYS. LETT. 68(3): 337-339 (1996).	
	CE	Sun C.J., et al., "Deposition of high quality wurtzite GaN films over cubic (1 1 1) MgAl <sub>2</sub> O <sub>4</sub> substrates using low pressure and metalorganic chemical vapor deposition, " APPL. PHYS. LETT. 68(8): 1129-1131 (1996).	
	CF	Nakamura, S., et al., "Characteristics of InGaN multi-quantum-well-structure laser diodes, " APPL. PHYS. LETT. 68(23): 3269-3271 (1996).	
	CG	Khan, M.A., et al., "Cleaved cavity optically pumped InGaN-GaN laser grown on spinel substrates," APPL. PHYS. LETT. 69(16): 2418-2420 (1996).	
	CH	Tempel, A., et al., "Nachweis von Stapelfehlern in GaN-Exitaxieschichten mittels Elektronenbeugung," KRISTALL UND TECHNIK 10(7): 741-746 (1975).	
	CI	Tempel, A., et al., "Zur Epitaxie von Galliumnitride auf nichtstoechiometrischem Spinel im System GaC <sub>1</sub> /NH <sub>3</sub> /He, " KRISTALL UND TECHNIK 10(7): 747-758 (1975)	
	CJ	K.V. Yumashev, "Saturable absorber Co <sup>2+</sup> : MgAl <sub>2</sub> O <sub>3</sub> crystal for Q switching of 1.34-um Nd <sup>3+</sup> : YAlO <sub>3</sub> and 1.54-um Er <sup>3+</sup> : glass lasers," APPLIED OPTICS 38(30): 6343-6346 (1999).	

Examiner  
Signature

Date

Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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	Art Unit	1775
	Examiner Name	Stephen J. Stein
Attorney Docket Number		1035-BI4282

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	DA	Giess et al., "Growth of Single Crystal MgGa <sub>2</sub> O <sub>4</sub> Spinel", IBM TECHNICAL DISCLOSURE BULLETIN, Vol. 15, no. 1, June 1972, pgs 151-152, XP-002315746.	
	DB	Anon., "Spinel Crystals for Electronic Devices", MANUFACTURING TECHNOLOGY NOTE, Vol. NTN-77, no. 0735, April 1977, XP-002315747.	
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Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Application Number	10/669,141
Filing Date	September 23, 2003
First Named Inventor	Milan R. Kokta
Art Unit	1775
Examiner Name	Stephen J. Stein
Attorney Docket Number	1035-BI4282

Sheet

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of

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**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	EA	Camargo, M.B., et al., "Co2+ Y3Sc2Ga3O12 (YSGG) Passive Q-Switch for Infared Erbium Lasers," submitted to LEOS in 1994.	
	EB	Mikhailov, V.P., et al., "Passive Q-switch performance at 1.3u (1.5u) and nonlinear spectroscopy of Co2+: MgAl2O4 and Co2+: LaMgAl11O9 crystals," OSA TOPS VOL. 26 Advanced Solid-State Lasers, pp. 317-324 (1999).	
	EC	Stulz, R.D., et al., "Diavalent Uranium and Cobalt Saturable Absorber Q-Switches at 1.5um," OSA Proceedings on Advanced Solid-State Lasers, 24:460-464 (1995).	
	ED	Birnbaum, M., et al., "Co2+: ZnSe Saturable Absorber Q-Switch for the 1.54 Um Er3+: Yb3+: Glass Laser," OSA TOPS Vol. 10 Advanced Solid State Lasers, pp. 148-151 (1997).	
	EE	Machida, H., et al., "difficulties encountered during the Czochralski growth of TiO2 single crystals," JOURNAL OF CYRSTAL GROWTH, 112: 835-837 (1997).	
	EF	Camargo, M.B., et al., "Broad-band 1.54 um Saturable Absorber Q-switch with Co2+, " submitted to ASSL in 1995.	
	EG		
	EH		
	EI		
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